We claim:

1.   A communications system for spontaneous enterprise conferencing comprising:

        at least one conference server located within a network;

5   at least one routing server located within a network;

        at least one client software application associated with a user where said client software application may be separate from a user's communications device used for participation in a conference;

        a data communications network for enabling said associated user client software

10   application to communicate with said conference server to initiate and receive conference participation requests; and

        wherein said conference server maintains presence and availability data for each said other users for each conference established and wherein said routing server establishes the communications media connection to said user's communication device

15   for participation in said established conference.

2.   The system of claim 1 wherein said conference server is comprised of

        a means for authenticating a users access to a conference.

3.   The system of claim 1 wherein said conference server is comprised of a means managing and updating said presence and availability lists stored in said database.

20   4.   The system of claim 1 further comprising:

        a database containing a lists of other users for which a first user may want to know of the their presence and availability in said system and wherein said conference system retrieves from said database said list of users for said first user to establish said conference.

25   5.   The system of claim 1 wherein said routing server is further comprised of:

        a public switched telephone network gateway;

        a means for multipoint audio conferencing; and

        a means for multipoint text conferencing and

        a means for application sharing.

30   6. The system of claim 5 further comprising:

        a mixing means located within each of said clients for mixing the communications from any one of said conferences sent by either said means for multipoint audio conferencing or said means for multipoint text conferencing.

7. A spontaneous enterprise communications server comprising:

35   a database containing lists of other users one user may want know of their presence and availability;

        a means for authenticating a users access to a conference

a means managing and updating said presence and availability lists stored in said database;

a public switched telephone network gateway;

a means for multipoint audio conferencing; and

a means for multipoint text conferencing.

8. A method for establishing a conference between participants in a system having a client server architecture, wherein said method comprises:

using the Session Initiation Protocol defined by the Internet Engineering Task Force for conference establishment wherein said client sends a SUSCRIBE message to said server to access the presence data of said conference; and

said server responds to said SUBSCRIBE message by sending a NOTIFY message to said client whenever the presence data of said conference changes.

9. A system for multiparty instantaneous communications comprising:

a centralized process for controlling communications access; and

a plurality of processes, each located with every end user device, for mixing multiple audio or textual communications connections wherein communications control is effected using the Session Initiation Protocol defined by the Internet Engineering Task Force.

10. The system of claim 9 wherein said centralized process for controlling communications access further comprising a means for establishing an object for each instantaneous communications sessions.

11. A system for establishing a conference between participants in a system having a client server architecture, wherein said system comprises:

a protocol means for conference establishment between said client and said server and wherein said protocol is characterized in having:

a globally unique user identifier;

enables users to subscribe to one or more conferences;

enables said server to redirect communications to a conference; and

enables said server to proactively notify one or more clients of any changes to any of said subscribed conferences.

12. The system of claim 11 wherein said protocol means is a Session Initiation Protocol means.

13. A method for inviting a user to join a conference in a system having a client server architecture, wherein said method comprises:

using the Session Initiation Protocol defined by the Internet Engineering Task Force for conference establishment;

sending an INVITE message from a first user to a communications control process;

responding to said INVITE message by forwarding said INVITE message from said first user from said communications control process to a second user; and

5   said second user accepts the invitation to join the conference by sending an OKAY message to said communications control process; and

said second user sends to said communications control process an address of a device said second user intends to use for participating in said conference.

10   14. The system of claim 2 further comprising:

a means for service registration.

15. The system of claim 1 further comprising:

an enterprise directory.

16. A method for secure instantaneous communications comprising the steps of:

15   generating a joint key for authenticating servers in a system;

authenticating a client to a server by generation of a second key;

encrypting messages between servers using said joint key; and

encrypting messages between a server and said client using said second key.

17. The method of claim 16 further comprising the steps of:

20   creating a conference session key for each conference; and

encrypting said conference session key with said second key for communication said conference session key to said client.

18. The method of claim 17 further comprising the steps, executed by a client, of:

encrypting authentication, time stamp and message data to be sent to a second

25   user on a conference; and

sending said encrypted authentication, time stamp, and message data to said second user wherein a client of said second user decrypts said authentication and time stamp data using said conference key and if said authentication and time stamp data is valid said second user decrypts said message data using said conference key.

30   19. The method of claim 18 further comprising the step of:

sending message data in encrypted, authenticated and time stamped form to multiple conference participants at the same time.

20. A method for creating a conference in a system having a client server architecture, wherein said method comprises:

35   sending message from a first user client to a communications control process to initiate a conference;

creating a conference object in said communication control process located in a control server for maintaining the presence and availability data of users to participated in said conference;

requesting a conference communications facility from a multiparty control process located in a routing server;

returning a conference identifier to said first user client; and

establishing a communications path from a user's communications device to said multiparty control process.

21.   The method of claim 20 further comprising the steps of:

requesting that a second user join said conference;

checking the presence and availability to see if said second user is able to join said conference;

forwarding said conference request to said second users client;

said second user client sending a join message back to said conference controller specifying a device address and media to be used for the conference; and

connecting said second users device to said multiparty control process.

22.   The system of claim 9 further comprising means for establishing multiple conferences using multiple devices simultaneously from a single user.